

SWBAT apply energy and power to exercise and food choices

Dec 3-9:10 AM

Welcome!!!

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SECA Physics
Wednesday 3 December 2014

- * Pick up:
- fitness power worksheet
 - slip of paper (for later)



Opening Question:

What does work and energy have to do with food and exercise?

Centering

↓
STORED ENERGY ↓
WORK

kcal
1 CALORIE = 4184 J
↳ JUST ANOTHER WAY TO MEASURE ENERGY & WORK

Sep 7-7:04 AM

Centering

Down to the fitness room -- let's explore this energy thing...

	WT	HT	↓	TIME
CURLS:	10 lb.	51 cm	.51 m	15.85 sec

Dec 7-7:51 AM

What did we find?

	ONCE	10X
CURLS:	22 J	229 J

$$1 \text{ CAL} = 4184 \text{ J}$$

Curling power? 14 W

Bike power? 400 W

LESLIE: HAMBURGER
280 cal

PING PONG
160 PER 30 MIN
~50 MIN

BICYCLING
225 PER 30 MIN
~40 MIN

Dec 7-7:51 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. About how much work did the "curler" do? (How many Joules)

20 - 200 J

2. Is that more or less than 1 Calorie?

LESS!

3. About how long would I need to bike to burn off a hamburger?

- A. a few minutes
B. 20-60 minutes
C. several hours

Dec 2-7:55 AM